**PA2 Report**

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1. I implemented each new animal by first creating a class with the animal’s name and then extending it from a parent class that I wanted it to inherit from, either Prey or Predator. For each class, I then made a constructor, the number of parameters varied depending on whether it was a Predator or Prey, and then to assign the parameters, I made a super call with the parameters I put in the constructor signature. I then overrode the getSymbol() method for each animal I created and returned whatever the first letter of the animal I created name was, such as Eagle would be ‘E’. I also overrode the toString() method for each animal, and I only changed the name of the animal so that it would print out.

2. I observed a power hierarchy where animals dominated in this order: Alligator, then Eagle, then Fox, and finally Cat. Whenever these animals came across each other, the animal with the higher power level would remain standing. Prey always lost to predators. I also noticed that prey moved randomly, while predators always approached the prey. There was a universal movement rule set for both animals, where they could only move one step up, down, left, or right. Nothing was diagonal.

3.

A screenshot of a computer

AI-generated content may be incorrect.